H-853-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Prior Application: C. UEMATSU et al
Serial No. 09/413,814
Filed: October 7, 1999

Group Art Unit: 1655
Examiner: J. Taylor
For: METHOD FOR ASSAYING DNA FRAGMENTS IN MIXTURE

PRELIMINARY AMENDMENT

Commissioner of Patents
Washington, D.C. 20231

Sir:

Before examination on the merits, please amend the above-identified application as follows:

IN THE SPECIFICATION

Please amend the specification as set forth below.

Page 1, before the first line of the specification please insert the sentence:

--This application is a continuation application of U.S. Serial No. 09/413,814, filed October 7, 1999.--

Page 7, the first full paragraph, lines 5-21, replace the paragraph with:

--So as to prepare plural primers at an equal T_m value, the individual primers are allowed to comprise a nucleotide sequence of several species of modules, each module being composed of 4 to 6 nucleotides. For example, 5 modules (A, B, C, D, and E), each module being composed of 4 nucleotides, are aligned sequentially in the order A-B-C-D-E to prepare a

primer with the nucleotide sequence or in the order C-D-B-A-E to prepare a primer with the latter nucleotide sequence. Herein, each of the individual modules comprises the same nucleotide species at both the termini thereof. Even if these modules that have same nucleotide species at the both termini are shuffled together in order, the nucleotide sequence in the linking region between the modules is never modified because the nucleotides at both the termini are identical. Thus, no effect of the change of the sequence order of these modules is reflected on the T_m value.--

Page 17, line 19: replace the paragraph with:

--5'-TTCTCCACTCATCACCGATCNN-3'--.

IN THE CLAIMS

Cancel claim 1, and add new claims 17-22 as follows:

--17. A method for amplifying nucleic acid comprising steps of:

preparing a first primer which has a first sequences of nucleotides and a first module,

preparing a second primer which has a second sequences of nucleotide and a second module,

amplifying said first primer and said second primer with PCR in one vessel,

wherein said first sequences of nucleotides is different from said second first sequences of nucleotides,

wherein a reaction efficiency of PCR reaction of said first module and said second module is substantially same.

--18. A method for amplifying nucleic acid according to claim 17, said first module and said second module have same melting temperature.

--19. A method for amplifying nucleic acid according to claim 17, said first module and said second module have same length.

--20. A method for amplifying nucleic acid according to claim 17, said first module and said second module have same composition of nucleotide.

--21. A method for amplifying nucleic acid comprising steps of:

preparing a plurality of primers which has different sequences of nucleotides each other and modules of same melting temperature, amplifying said plurality of primers with PCR in one vessel.

--22. A method for amplifying nucleic acid according to claim 21, said modules have same length and same composition of nucleotide.--

REMARKS

Entry and examination of the foregoing amendments is requested.

Respectfully submitted,

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